

Test Procedure for §170.302 (b) Maintain up-to-date problem list

This document describes the draft test procedure for evaluating conformance of complete EHRs or EHR modules to the certification criteria defined in 45 CFR Part 170 Subpart C of the Interim Final Rule (IFR) as published in the Federal Register on January 13, 2010. The document is organized by test procedure and derived test requirements with traceability to the normative certification criteria as described in the Overview document located at <http://healthcare.nist.gov>. These test procedures will be updated to reflect the certification criteria defined in the ONC Final Rule.

CERTIFICATION CRITERIA

§170.302 (b) Maintain up-to-date problem list. Enable a user to electronically record, modify, and retrieve a patient's problem list for longitudinal care in accordance with:

- (1) The standard specified in §170.205(a)(2)(i)(A); or
- (2) At a minimum, the version of the standard specified in §170.205(a)(2)(i)(B).

INFORMATIVE TEST DESCRIPTION

This section provides an informative description of how the test procedure is organized and conducted. It is not intended to provide normative statements of the certification requirements.

This test evaluates the capability for a Complete EHR or combination of EHR Modules to enable a user to electronically record, modify, and retrieve a patient's problem list over multiple visits with the same provider. The test also evaluates conformance to the problem list vocabulary standards. This test procedure is organized into three sections:

- Record - evaluates the capability to enter patient health problems into the EHR to create the patient problem list
 - The Tester enters the NIST-supplied patient problem test data, The Inspection Test Guide describes several methods by which the EHR can demonstrate conformance with the vocabulary requirement.
- Modify – evaluates the capability to edit patient problem list data which have been previously entered into the EHR
 - The Tester displays the patient problem list data entered during the Record Patient Problems test
 - The Tester edits the previously entered patient problems data using NIST-supplied patient problem list data.
- Retrieve – evaluates the capability to display and view the patient problem list data which have been previously entered into the EHR, including the capability to display the patient problem list spanning multiple visits
 - The Tester displays the patient problems data entered during the test
 - The Tester displays the patient problem list recorded during multiple visits

- The Tester validates that the displayed problem list data are accurate and complete

REFERENCED STANDARDS

170.205(a)(2) (i) Problem list.	Regulatory Referenced Standard
(A) <u>Standard</u> . The code set specified for the conditions specified at 45 CFR 162.1002(a)(1).	45 CFR 162.1002(a)(1). (1) <i>International Classification of Diseases, 9th Edition, Clinical Modification, (ICD–9–CM), Volumes 1 and 2</i> (including The Official ICD–9–CM Guidelines for Coding and Reporting), as maintained and distributed by HHS, for the following conditions: (i) Diseases. (ii) Injuries. (iii) Impairments. (iv) Other health problems and their manifestations. (v) Causes of injury, disease, impairment, or other health problems.
(B) <u>Alternative standard</u> . International Health Terminology Standards Development Organization (IHTSDO) Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) July 2009 version (incorporated by reference in §170.299).	

NORMATIVE TEST PROCEDURES

Derived Test Requirements

- DTR170.302.b – 1: Electronically Record Patient Problem List
DTR170.302.b – 2: Electronically Modify Patient Problem List
DTR170.302.b – 3: Electronically Retrieve Patient Problem List

DTR170.302.b – 1: Electronically Record Patient Problem List

Required Vendor Information

- VE170.302.b – 1.01: Vendor shall identify a patient with an existing record in the EHR containing patient problems entered during multiple prior visits to be used for this test
- VE170.302.b – 1.02: Vendor shall identify the EHR function(s) that are available to: 1) select the patient, 2) enter patient problems, 3) modify (correct/update) patient problems, 4) retrieve patient problem list, and 5) retrieve patient problem history
- VE170.302.b – 1.03: Vendor shall identify which vocabulary standard is implemented in the EHR for patient problems (ICD-9 or SNOMED)

Required Test Procedure:

- TE170.302.b – 1.01: Tester shall select patient problems data from NIST-supplied test data sets

- TE170.302.b – 1.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and enter patient problem list data from the test data sets
- TE170.302.b – 1.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient problem test data have been entered correctly, without omission and in conformance with the vocabulary standard identified by the Vendor.

Inspection Test Guide

- IN170.302.b – 1.01: Tester shall verify that the patient problem list test data are entered correctly and without omission
- IN170.302.b – 1.02: Tester shall verify that the patient problem list data entered during the test are associated with one of the required standard terminologies (ICD-9, SNOMED CT). Validation methods include, but are not limited to:
- verifying that the appropriate terminology code is displayed along with the patient problem description when the user is recording patient problems; or
 - verifying that the EHR includes the capability to cross-reference (map) the user-displayed problem descriptions to the appropriate vocabulary codes; or
 - verifying that the patient problem list data stored in the EHR contains the appropriate vocabulary codes
- IN170.302.b – 1.03: Tester shall verify the patient problem list data are stored in the patient's record

DTR170.302.b – 2: Electronically Modify Patient Problem List

Required Vendor Information

- No additional information required

Required Test Procedure:

- TE170.302.b – 2.01: Tester shall select patient problem test data from NIST-supplied test data sets
- TE170.302.b – 2.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record, shall display the patient problem list data entered during the Record Patient Problems test, and shall edit (correct/update) the previously entered patient problem list data
- TE170.302.b – 2.03: Using the NIST-supplied Inspection Test Guide, the Tester shall verify that the patient problem list data entered in the Modify Patient Problems test have been entered correctly and without omission

Inspection Test Guide:

- IN170.302.b – 2.01: Tester shall verify that the patient problems entered during the Record Patient Problems test can be accessed and edited (corrected/updated)

IN170.302.b – 2.02: Tester shall verify that the modified patient problem list data are stored in the patient's record

DTR170.302.b – 3: Electronically Retrieve Patient Problem List and Problem List History

Required Vendor Information

- No additional information required

Required Test Procedure:

TE170.302.b – 3.01: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and shall display and view the patient problems entered during the Record and Modify Patient Problems tests

TE170.302.b – 3.02: Using the EHR function(s) identified by the Vendor, the Tester shall select the patient's existing record and shall display and view the patient problem history from prior visits

TE170.302.b – 3.03: Using the NIST-supplied Inspection Test Guide, the tester shall verify that the patient problem list test data and the patient problem history display correctly and without omission

Inspection Test Guide

IN170.302.b – 3.01: Tester shall verify that the patient problem list data entered in the Record Patient Problems and edited in the Modify Patient Problems tests display correctly and without omission

IN170.302.b – 3.02: Tester shall verify that the patient problem history data from prior visits display correctly and without omission

EXAMPLE TEST DATA

Record Patient Problems

ICD-9 Code	Patient Problems	Status	Date Diagnosed
780.2	Syncope and collapse, vasovagal attack	Active	2/15/10
716.17 E888.9	Traumatic arthropathy, left ankle	Active	2/15/10
V12.54	Cerebrovascular Accident (Stroke)	Active	7/9/09
V13.02	Urinary tract infection, recurrent	Active	9/22/08
496.0	Chronic Obstructive Pulmonary Disease	Active	8/12/07
401.9	Hypertension, essential	Active	5/16/06

SNOMED Code	Patient Problems	Status	Date Diagnosed
398665005	Vasovagal syncope	Active	2/15/10
201954006	Traumatic arthropathy, left ankle	Active	2/15/10
230690007	Cerebrovascular Accident (Stroke)	Active	7/9/09
197927001	Recurrent urinary tract infection	Active	9/22/08
13645005	Chronic Obstructive Lung Disease	Active	8/12/07
59621000	Essential Hypertension	Active	5/16/06

Modify Patient Problems

Modify the Date Diagnosed for the Cerebrovascular Accident (Stroke).

Modify the Status of the Urinary tract infection, recurrent.

ICD-9 Code	Patient Problems	Status	Date Diagnosed
V12.54	Cerebrovascular Accident (Stroke)	Active	7/9/08
V13.02	Urinary tract infection, recurrent	Resolved	9/22/08

SNOMED Code	Patient Problems	Status	Date Diagnosed
230690007	Cerebrovascular Accident (Stroke)	Active	7/9/08
197927001	Recurrent urinary tract infection	Resolved	9/22/08

Retrieve Patient Problem List

Active Problems only

ICD-9 Code	Patient Problems	Status	Date Diagnosed
780.2	Syncope and collapse, vasovagal attack	Active	2/15/10
716.17 E888.9	Traumatic arthropathy, left ankle	Active	2/15/10
V12.54	Cerebrovascular Accident (Stroke)	Active	7/9/08
496.0	Chronic Obstructive Pulmonary Disease	Active	8/12/07
401.9	Hypertension, essential	Active	5/16/06

SNOMED Code	Patient Problems	Status	Date Diagnosed
398665005	Vasovagal syncope	Active	2/15/10
58188004	Traumatic arthropathy, left ankle	Active	2/15/10
230690007	Cerebrovascular Accident (Stroke)	Active	7/9/08
13645005	Chronic Obstructive Lung Disease	Active	8/12/07
59621000	Essential Hypertension	Active	5/16/06

Retrieve Patient Problem History

List(s) of Active and Resolved Problems

ICD-9 Code	Patient Problems	Status	Date Diagnosed
780.2	Syncope and collapse, vasovagal attack	Active	2/15/10
716.17 E888.9	Traumatic arthropathy, left ankle	Active	2/15/10
V12.54	Cerebrovascular Accident (Stroke)	Active	7/9/08
V13.02	Urinary tract infection, recurrent	Resolved	9/22/08
496.0	Chronic Obstructive Pulmonary Disease	Active	8/12/07
401.9	Hypertension, essential	Active	5/16/06

SNOMED Code	Patient Problems	Status	Date Diagnosed
398665005	Vasovagal syncope	Active	2/15/10
201954006	Traumatic arthropathy, left ankle	Active	2/15/10
230690007	Cerebrovascular Accident (Stroke)	Active	7/9/08
197927001	Recurrent urinary tract infection	Resolved	9/22/08
13645005	Chronic Obstructive Lung Disease	Active	8/12/07
59621000	Essential Hypertension	Active	5/16/06

CONFORMANCE TEST TOOLS

None